

Print Date: 12/19/03 12:35:17 PM

SuperFlow WinDyn

**TOROMONT CAT**

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*Don B.*  
*Dec 17, 2003*

**Owner**

DECILOET LTD.  
 P.O. BOX 145

Contact: ADAM MACISAAC

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TILLSTINEBURG, ON N6G 4H3 CANADA

**Test Device**

Vehicle		Engine		Transmission	Driveline
Make	LINCOLN	Make	LINCOLN	Make	Ratio
Model	NAVIGATOR	Model	V8	Model	Axles
Year	2003	Type		Type	Tire Type
Weight		Serial No			Tire Size
Mileage		Part Spec.			Tire Tread
VIN	6LMFV28R53L031209				
ID No					

**Miscellaneous**

Accessories	Fuel Supply	AUXILIARY	O2 Location
Combustion Sys.	ECU ID		Exhaust Desc.
Intake System	Exhaust ID		Thermostat
Air Filter	Spark Plug ID		Coolant
Governor	Catalytic Conv.		Lubricant
Fuel Type	O2 Sensor		Oil Cooler

**Test Information**

Repair Order	Date	12/19/03	Time	12:01
Dyno Location	Test Serial No	474	System ID	
Test Description	Chr Filename	SF002	Test Type	
Test Filename	Dyno Operator			
Data Filename				

**Comments**

LOADED VEHICLE TO A CONSTANT LOAD AS REQUESTED BY CUSTOMER AND MONITORED ROAD SPEED AND VEHICLE POWER TO ENSURE IT REMAINED CONSTANT. TOTAL TEST TIME WAS 20 MINUTES. VEHICLE WAS RAN WITH EXACTLY 80 LITRES AT THE START. AFTER THE RUN WAS COMPLETE THERE WAS 74 LITRES REMAINING.

**Data-Basic Horsepower Test**

Lane No	Veh Spd mph	Veh Pwr Hp	Veh Tq lb-ft
1	63.8	38	386
2	63.7	41	361
3	60.3	40	369
4	62.6	42	377
5	61.4	39	355

**Latest Test Results**

Numerous emission and fuel mileage tests were performed in 2003. Following are the results of the latest tests done in November and December of 2003.

**A) Ontario Drive Clean Program - Vehicle Emissions Report Summary****Vehicle Information**

Year: 2003

Make: Ford

Model: Lincoln Navigator

Test Date: November 4, 2003

Test Location: George's Garage, Tillsonburg, ON, Canada

**Test 1**

	Without Unit	With Unit	% Reduction
RPM: Idle			
HC ppm	15	3	80%
CO %	0.03	0.00	100%
CO2%	14.9	15.3	-
O2%	0.0	0.0	-
NOx ppm	8	0	100%

**RPM: 1800**

HC ppm	9	1	89%
CO %	0.02	0.00	100%
CO2%	14.9	14.9	-
O2%	0.0	0.0	-
NOx ppm	4	0	100%

**Test 2**

	Without Unit	With Unit	% Reduction
RPM: Idle			
HC ppm	7	4	43%
CO %	0.03	0.00	100%

**RPM: 2500**

HC ppm	11	5	55%
CO %	0.00	0.00	-

**B) Ontario Drive Clean Program -- Snap Acceleration Emissions Inspection  
Vehicle Emissions Report Summary****Vehicle Information**

Year: 2003  
Make: Peterbilt  
Model: 379  
Engine:  
Make: CAT  
Model: C-15

Test Date: December 9, 2003

Test Location: Taylor Diesel Services, Hamilton, ON

	Without Unit	With Unit	% Reduction
RPM: Idle			
Opacity %:	1.9%	0.2%	89%
RPM: 2600			
Opacity %:	5.4%	4.1%	24%*

\* Electronic Malfunction during testing.

**Fuel Efficiency Vehicle Report Summary****A) Vehicle Information**

Year: 2003  
Make: Ford  
Model: Lincoln Navigator

Test Date: December 19, 2003

Test Location: Toromont CAT, London, ON, Canada

	Without Unit	With Unit	% Increase
Test Time (min.)	20	20	
Total Start Fuel (L)	89	80	
Remaining Fuel (L)	69.75	74	
Fuel Utilized During Test	10.25	6	41%

**B) Vehicle Information****Year:** 2003**Make:** Peterbilt**Model:** 379**Engine****Make:** CAT**Model:** C-15**Test Date:** December 24, 2003**Test Location:** Toromont Cat, London, ON, Canada

	Without Unit	With Unit	% Increase
Test Time (min.)	20	20	
Total Start Fuel (L)	132	120	
Remaining Fuel (L)	114.6	107.5	
Fuel Utilized During Test	17.4	12.5	28%

Further emission and fuel mileage testing to be done at Bodycote Material Testing Inc., Mississauga, ON. Bodycote is one of the top ten analytical laboratories in Canada. All of their activities are governed by a strict quality system. The laboratory is accredited to ISO Guide 17025 by the Quebec Ministry of Environment and by the Standards Council of Canada. Bodycote is particularly conscious of the importance of producing analytical results that are precise, exact, and on time. Furthermore, the data is presented in a clear, concise format and is legally defensible.

Bodycote offers laboratory services on a complete range of environmental samples for waters, soils & air, fuels and lubricants, comprehensive ecotoxicology protocols, and others.